

To Be Delivered/Completed

07/23/08

MO Department of Transportation **General Services** Facilities Management

FM06

F.O.B. Requirements:

Destination

REQUEST FOR QUOTATION FOR PURCHASES FROM \$3,000 TO \$24,999.99 THIS IS NOT AN ORDER

Return original copy only. It is the contractor/vendor's responsibility to read and comply with all conditions, specifications, and instructions outlined in this document. This document and any subsequent attachments shall supersede all confirmation forms, receipts or any other paperwork needed to secure services, material, and/or equipment. Today's Date: Quote Due By (Date)

1:00 PM

Quotation #: 10-09-002-BG

07/31/08

No 20 Bonvered/Completed	Quotation #: 10-09-002-BG This Quotation # should be referenced on all		D			
No Later Than:			Buyer Name/Telephone Number:			
08/13/08	mailing labels, envelopes, and a	any other	Facility Operations Supervisor			
<u> </u>	correspondence.	iny other	L. David Fleming			
District Mailing Address:			573-472-5231			
Missouri Dept. of Transportation		Delivery Loca	tions:			
P.O.	Por 160					
P.O. Box 160		Marble Hill	Marble Hill Maintenance building, located on Rte. 2			
Sikeston, MO. 63801 OR FAX TO:		State Hwy. 5	State Hwy. 51, South side of Marble Hill, MO. 63764			
			, 110.05/04			
Fax: 573-472-6618 Attention: David Fleming						
						
	Descrin	tion of Project				
Furnish all materials and e	Comment needed to nome are	1 1 2	he existing Roofing materials including but			
not necessary limited to: a	ll existing shingles old mark	and dispose of the	ne existing Roofing materials including but			
not necessary limited to: all existing shingles, old roof edging, felt, nails, and any decking that needs replaced, as specified in this proposal. It will be the contractor's responsibility to remain any decking that needs replaced, as						
specified in this proposal. It will be the contractor's responsibility to repair any damage to the existing structure						
that may occur during removal of the existing shingles or during placement of new shingles. Contractor shall functional system. The building is 105' x 35' in size. It will be the recovery it it is a structure of the existing structure include all trim, flashing, any needed decking, weatherproofing, etc. as required to provide a complete and						
functional greaters. The	ny needed decking, weather	proofing, etc. as	required to provide a complete and			
measurement of building.		T	or an oradors to get exact			
See attached sheets for Ger	neral Requirements.					
This is a prevailing wage project. Contractor must comply with Missouri Division of Labor Standards for Bollinger Co. wage order # 14.						
Co. wage order # 14.	s and the second	this with Misson	a Division of Labor Standards for Bollinger			
-						
Attached 5-pages (Terms &	(Conditions) -1-11					
Any questions please contr	conditions) shall apply.					
Any questions please conta	ict David Fleming at 573-38	30-5836				
	Mandatory Required Com	pletion Date: A	ugust, 13, 2008			
			7,000 20, 2000			
		TOTAL PR	OJECT BID PRICE: \$_			
VENDOR NAME:			OJECT BID PRICE: \$			
Mailing Address:		77. 1				
		Vendor Contact	Information (including area codes):			
		Phone #:				
		Fax #:				
		Federal ID Tax #	#:			
Drinted N						
Printed Name and Title of Responsible Officer/Employee:		Signature:				

Women Business Enterprise (WBE)? Yes

No

Is your company registered/certified with the State of Missouri as a (Please circle):

No

Minority Business Enterprise (MBE)? Yes

STANDARD SOLICITATION PROVISIONS

- a. The Missouri Department of Transportation (MoDOT) reserves the right to reject any or all bids/quotes/proposals, and to accept or reject any items thereon, and to waive technicalities. In case of error in the extension of prices in the bid/quote/proposal, unit prices will govern.
- All bids/quotes/proposals must be signed with the firm name and by a responsible officer or employee. Obligations assumed by such signature must be fulfilled.
- c. By virtue of statutory authority, a preference will be given to materials, products, supplies, provisions and all other articles produced, manufactured, made or grown, within the State of Missouri.
- d. Time of delivery is a part of the consideration and, if not otherwise stated in the solicitation documents, must be stated in definite terms by the Bidder/Offeror and must be adhered to. If time varies on different items, the Bidder/Offeror shall so state.
- e. If providing bids/quotes/proposals for commodities, the Bidder/Offeror will state brand or make on each item. If bidding or proposing other than the make, model or brand specified, the manufacturer's name, model number or catalog number must be given.
- f. For bids/proposals of \$25,000 or more, no bids/proposals by telephone, telegram or telefax will be accepted. If provided, these bids/proposals should be returned in the MoDOT solicitation return envelope.
- g. If a solicitation return envelope is provided by MoDOT, the bid/quote/proposal should be returned in the envelope provided with the Bid/RFQ/RFP Request Number plainly indicated thereon.
- h. The date specified for the returning of bids/quotes/proposals is a firm deadline and all bids/quotes/proposals must be received at the designated office by that time. The Department does not recognize the U.S. Mail, Railway Express Agency, Air Express, or any other organization, as its agent for purposes of accepting proposals. All proposals arriving at the designated office after the deadline specified will be rejected.

GENERAL TERMS AND CONDITIONS

General Performance

a. This work is to be performed under the general supervision and direction of the Missouri Department of Transportation (MoDOT) and, if awarded any portion of the work, the Contractor agrees to furnish at his own expense all labor and equipment required to complete the work, it being expressly understood that this solicitation is for completed work based upon the price(s) specified and is not a solicitation for rental of equipment or employment of labor by MoDOT, and MoDOT is to have no direction or control over the employees used by the Contractor in performance of the work.

Deliveries

a. Unless otherwise specified on the solicitation documents or purchase order, suppliers shall give at least 24 hours advance notice of each delivery,. Delivery will only be received between the hours of 8:00 a.m. to 3:00 p.m., Monday through Friday. Material arriving after 3:00 p.m. will not be unloaded until the following workday. No material will be received on Saturday, Sunday or state holidays.

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- b. If the prices bid herein include the delivery cost of the material, the Contractor agrees to pay all transportation charges on the material as FOB - Destination. Freight costs must be included in the unit price bid and not listed as a separate line item.
- Any demurrage is to be paid by the Contractor direct to the railroad or carrier.

Nondiscrimination

- a. The Bidder/Offeror understands that this project involves state funds and the Bidder/Offeror awarded the contract will be required to comply with the Executive Order 05-30 of the Governor of the State of Missouri dated September 8, 2005. This order stipulates that there shall be no discriminatory employment practices by the Contractor or his subcontractors, if any, based on race, sex, religion, national origin, age, color, disability, or veteran status. The undersigned Contractor or his subcontractors, if any, shall give written notice of their commitments under this clause to any labor union with which they have bargaining or other agreements.
- b. The Contractor shall comply with the Regulations relative to nondiscrimination in federally-assisted programs of the Department of Transportation, Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time, (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.
- c. All solicitations either by competitive bidding or negotiation made by the Contractor for work to be performed under a subcontract, including procurements of materials or leases of the Contractor's obligations under this contract and the Regulations, will be relative to nondiscrimination on the grounds of race, color, or national origin.
 - Sanctions for Noncompliance: In the event of the Contractor's noncompliance with the nondiscrimination provisions of this contract, MoDOT shall impose such contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to:
 - i. withholding of payments to the Contractor under the contract until the Contractor complies, and/or,
 - ii. cancellation, termination or suspension of the contract, in whole or in part.

Contract/Purchase Order

- a. By submitting a bid/quote/proposal, the Bidder/Offeror agrees to furnish any and all equipment, supplies and/or services specified in the solicitation documents, at the prices quoted, pursuant to all requirements and specifications contained therein.
- b. A binding contract shall consist of: (1) the solicitation documents, amendments thereto, and/or Best and Final Offer (BAFO) request(s) with any changes/additions, (2) the Contractor's proposal and/or submitted pricing, and (3) the MHTC's acceptance of the proposal and/or bid by purchase order.
- c. A notice of award does not constitute an authorization for shipment of equipment or supplies or a directive to proceed with services. Before providing equipment, supplies and/or services, the Contractor must receive a properly authorized purchase order and/or notice to proceed.

d. The contract expresses the complete agreement of the parties and performance shall be governed solely by the specifications and requirements contained therein. Any change, whether by modification and/or supplementation, must be accomplished by a formal contract amendment signed and approved by and between the duly authorized representative of the Contractor and the duly authorized representative of the MHTC, by a modified purchase order prior to the effective date of such modification. The Contractor expressly and explicitly understands and agrees that no other method and/or no other document, including correspondence, acts, and oral communications by or from any person, shall be used or construed as an amendment or modification.

Subcontracting

- a. It is specifically understood that no portion of the material or any interest in the contract, shall be subcontracted, transferred, assigned or otherwise disposed of, except with the written consent of MoDOT. Request for permission to subcontract or otherwise dispose of any part of the work shall be in writing to MoDOT and accompanied by documentation showing that the organization which will perform the work is particularly experienced and equipped for such work.
- b. Consent to subcontract or otherwise dispose of any portion of the work shall not be construed to relieve the Contractor of any responsibility for the production and delivery of the contracted work and the completion of the work within the specified time.
- c. All payments for work performed by a subcontractor shall be made to the Contractor to whom the contract was awarded and the purchase order issued.

Invoicing and Payment

- a. MoDOT is exempt from paying Missouri Sales Tax, Missouri Use Tax and Federal Excise Tax. However, the Contractor may themselves be responsible for the payment of taxes on materials they purchase to fulfill the contract. A Federal Excise Tax Exemption Certificate will be furnished to the successful Bidder/Offeror upon request.
- b. Each invoice should be itemized in accordance with items listed on the purchase order and/or contract. The statewide financial management system has been designed to capture certain receipt and payment information. Therefore, each invoice submitted must reference the purchase order number and must be itemized in accordance with items listed on the purchase order. Failure to comply with this requirement may delay processing of invoices for payment.
- Unless otherwise provided for in the solicitation documents, payment for all equipment, supplies, and/or services required herein shall be made in arrears. The Missouri Highways and Transportation Commission (MHTC) shall not make any advance deposits.
- d. The MHTC assumes no obligation for equipment, supplies, and/or services shipped or provided in excess of the quantity ordered. Any authorized quantity is subject to the MHTC's rejection and shall be returned at the Contractor's expense.
- e. The MHTC reserves the right to purchase goods and services using the state purchasing card.

Applicable Laws and Regulations

a. The contract shall be construed according to the laws of the State of Missouri. The Contractor shall comply with all local, state, and federal laws and regulations related to the performance of the contract.

- b. The Contractor must be registered and maintain good standing with the Secretary of State of the State of Missouri and other regulatory agencies, as may be required by law or regulations. Prior to the issuance of a purchase order and/or notice to proceed, the Contractor may be required to submit to MoDOT a copy of their current Authority Certificate from the Secretary of State of the State of Missouri.
 - Prior to the issuance of a purchase order and/or notice to proceed, all out-of-state Contractors <u>providing services</u> within the state of Missouri must submit to MoDOT a copy of their current Transient Employer Certificate from the Department of Revenue, in addition to a copy of their current Authority Certificate from the Secretary of State of the State of Missouri.
- c. The exclusive venue for any legal proceeding relating to or arising, out of the contract shall be in the Circuit Court of Cole County, Missouri.

Preferences

- In the evaluation of bids/quotes/proposals, preferences shall be applied in accordance with Chapter 34 RSMo. Contractors should apply the same preferences in selecting subcontractors.
- b. By virtue of statutory authority, RSMo. 34.076 and 34.350 to 34.359, a preference will be given to materials, products, supplies, provisions and all other articles produced, manufactured, made or grown within the State of Missouri. Such preference shall be given when quality is equal or better and delivered price is the same or less.
 - If attached, the document entitled "PREFERENCE IN PURCHASING PRODUCTS" should be completed and returned with the solicitation documents.
 - 2) If attached, the document entitled "MISSOURI DOMESTIC PRODUCTS PROCUREMENT ACT" should be completed and returned with the solicitation documents. Applies if bid is Twenty-Five Thousand Dollars (\$25,000.00) or more
- c. In the event of a tie of low bids, the MHTC reserves the right to establish the method to be used in determining the award

Remedies and Rights

- a. No provision in the contract shall be construed, expressly or implied, as a waiver by the MHTC of any existing or future right and/or remedy available by law in the event of any claim by the MHTC of the Contractor's default or breach of contract.
- b. The Contractor agrees and understands that the contract shall constitute an assignment by the Contractor to the MHTC of all rights, title and interest in and to all causes of action that the Contractor may have under the antitrust laws of the United States or State of Missouri for which causes of action have accrued or will accrue as the result of or in relation to the particular equipment, supplies, and/or services purchased or produced by the Contractor in the fulfillment of the contract with the MHTC.
- c. In the event a Contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the Contractor may request MoDOT to enter into such litigation to protect the interests of the MHTC, and, in addition, the Contractor may request the United States to enter into such litigation to protect

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the interests of the United States.

Cancellation of Contract

- a. The MHTC may cancel the contract at any time for a material breach of contractual obligations or for convenience by providing the Contractor with written notice of cancellation. Should the MHTC exercise its right to cancel the contract for such reasons, cancellation will become effective upon the date specified in the notice of cancellation sent to the Contractor.
- b. If the MHTC cancels the contract for breach, the MHTC reserves the right to obtain the equipment, supplies, and/or services to be provided pursuant to the contract from other sources and upon such terms and in such manner as the MHTC deems appropriate and charge the Contractor for any additional costs incurred thereby.

Bankruptcy or insolvency

a. Upon filing for any bankruptcy or insolvency proceeding by or against the Contractor, whether voluntary or involuntary, or upon the appointment of a receiver, trustee, or assigned the benefit or creditors, the Contractor must notify MoDOT immediately. Upon learning of any such actions, the MHTC reserves the right, at its sole discretion, to either cancel the contract or affirm the contract and hold the Contractor responsible for damages.

Inventions, Patents, and Copyrights

a. The Contractor shall defend, protect, and hold harmless the MHTC, its officers, agents, and employees against all suits of law or in equity resulting from patent and copyright infringement concerning the Contractor's performance or products produced under the terms of the contract.

Inspection and Acceptance

- No equipment, supplies, and/or services received by MoDOT pursuant to a contract shall be deemed accepted until MoDOT has had reasonable opportunity to inspect said equipment, supplies, and/or services.
- b. All equipment, supplies, and/or services which do not comply with the specifications and/or requirements or which are otherwise unacceptable or defective may be rejected. In addition, all equipment, supplies, and/or services which are discovered to be defective or which do not conform to any warranty of the Contractor upon inspection (or at any later time if the defects contained were not reasonably ascertainable upon the initial inspection) may be rejected.
- c. The MHTC reserves the right to return any such rejected shipment at the Contractor's expense for full credit or replacement and to specify a reasonable date by which replacements must be received.
- d. The MHTC's right to reject any unacceptable equipment, supplies, and/or services shall not exclude any other legal, equitable or contractual remedies the MHTC may have.

Warranty

a. The Contractor expressly warrants that all equipment, supplies, and/or services provided shall: (1) conform to each and every specification, drawing, sample or other description which was furnished to or adopted by MoDOT, (2) be fit and sufficient for the purpose expressed in the solicitation documents, (3) be merchantable, (4) be of good materials and workmanship, and (5) be free from defect.

 Such warranty shall survive delivery and shall not be deemed waived either by reason of the MHTC's acceptance of or payment for said equipment, supplies, and/or services.

Status of Independent Contractor

a. The Contractor represents itself to be an independent Contractor offering such services to the general public and shall not represent itself or its employees to be an employee of the MHTC. Therefore, the Contractor shall assume all legal and financial responsibility for taxes, FICA, employee fringe benefits, workers' compensation, employee insurance, minimum wage requirements, overtime, etc., and agrees to indemnify, save and hold the MHTC, its officers, agents and employees harmless from and against any and all losses (including attorney fees) and damage of any kind related to such matters.

Indemnification

- The Contractor shall be responsible for injury or damages as a result of any services and/or goods rendered under the terms and conditions of this Agreement.
- b. In addition to the liability imposed upon the Contractor on the account of personal injury, bodily injury, including death, or property damage, suffered as a result of the Contractor's performance under this Agreement, the Contractor assumes the obligation to save harmless the Commission, including its agents, employees and assigns, and to indemnify the Commission, including its agents, employees and assigns, from every expense, liability or payment arising out of such wrongful or negligent act or omission, including legal fees.
- c. The Contractor also agrees to hold harmless the Commission, including its agents, employees and assigns, from any wrongful or negligent act or omission committed by any subcontractor or other person employed by or under the supervision of the Contractor for any purpose under this Agreement, and to indemnify the Commission, including its agents, employees and assigns, from every expense, liability or payment arising out of such wrongful or negligent act or omission.

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SPECIAL TERMS AND CONDITIONS

Insurance

- a. The Contractor shall purchase and maintain such insurance as will protect him from claims under workmen's compensation acts and other employee benefit acts, from claims for damages because of bodily injury, including death, and from claims for damages to property which may arise out of or result from the Contractor's operations under this Contract, whether such operations be by himself or by any Subcontractor or anyone directly or indirectly employed by any of them.
- b. This insurance shall be written for not less than any limits of liability specified as part of this contract, or required by law, whichever is the greater, and shall include contractual liability insurance as applicable to the Contractor's obligations under this contract. Unless otherwise specified, insurance limits shall be as follows:
 - Workmen's Compensation: Workers
 Compensation Insurance, including "Occupational Disease Act" requirements, must be maintained if required by law.
 - Public Liability (includes property damage and personal injury):
 - Not less than \$400,000 for any one person in a single accident or occurrence.
 - Not less than \$2,500,000 for all claims arising out of a single occurrence.
 - 3) Special Hazard Insurance: As required.
 - Builder's Risk: Not less than the full Contract amount.

Required Specifications

 All materials, equipment, and/or services bid upon must comply with the attached Specifications and any other provisions outlined in the solicitation documents.

Prevailing Wage

- a. If the bid/quote/proposal is accepted, the vendor will be required to comply with the prevailing wages as fixed by the Missouri Department of Labor and Industrial Relations, in effect as of the date of the issuance of the solicitation, for each affected craft and type of workmen in the following county(ies): ___Bollinger __. The Annual Wage Order #__14__ may be inspected at any District Office or at the Central Office in Jefferson City, MO.
- b. The Contractor shall submit notarized weekly payroll affidavit documentation included with the project request for payment. The successful vendor must provide a lien waiver from all material suppliers.

Permits, Licenses and Safety Issues

- a. The contract price shall include any necessary permits and licenses required by law incidental to the work. Local ordinances requiring building permits are not applicable to state agencies.
- b. The Contractor will comply with local laws involving safety in the prosecution of the work.

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Award

 Award of this bid/quote/proposal will be made on an "All Or Nothing" basis using the "lowest and best" principle of award.

Notice to Proceed

a. Within 30 days after the execution of the contract, a "Notice to Proceed" will be issued by the Department. A purchase order will be attached to the "Notice to Proceed," which will specify the date or dates that the Contractor can start delivery, roadway or stockpile delivery and will also include the completion dates. These dates will be in accordance with the dates shown in the proposal.

Delivery - Additional Requirements

 The following days shall be construed as official holidays under the terms of the contract:

January I New Year's Day Third Monday in January Martin Luther King, Jr.'s Birthday February 12 Lincoln's Birthday Third Monday in February Washington's Birthday May 8 Truman's Birthday Last Monday in May Memorial Day July 4 Independence Day First Monday in September Labor Day Second Monday in October Columbus Day November 11 Veteran's Day Fourth Thursday in November Thanksgiving Day December 25 Christmas Day

- b. When any of the above holidays falls on a Sunday, the holiday will be observed on the following Monday; when any of the above holidays falls on a Saturday, the holiday will be observed on the immediately preceding Friday.
- c. Contractor will not be required to provide dozers, loaders, motorgraders, or other equipment for shaping of stockpiles, constructing ramps or runways, or leveling of the top of a completed lift, unless otherwise noted herein.

Temporary Suspension of Work

- a. The District Engineer shall have authority to suspend work wholly or in part for such period or periods as may be deemed necessary when weather or other conditions are such that in the opinion of the engineer, the work may be done at a later time with advantage to the Department or for failure on the part of the Contractor to comply with any of the provisions of the Contract.
- b. If the Department suspends the work for its own advantages and not because of the Contractor's failure to comply with the Contract, the Contractor will be allowed an equal number of calendar days after the completion date for the completion of the work. The Department may at its discretion give the Contractor an extension of time for completing the work where the Contractor incurs delays for causes beyond his control.
- c. Normal rainfall is not considered a cause qualifying for an extension of time. Claim for extension of time for all causes must be submitted by the Contractor in writing within 30 Days after the claimed cause for the delay has ceased to exist.

Cancellation of Contract

- a. If the Contractor/supplier fails to carry out the performance of the work with sufficient workmen and equipment to insure the completion of the delivery within the time specified or becomes insolvent or is adjudicated a bankrupt or commits any act of bankruptcy or insolvency or allows any final judgment to stand against him for a period of ten (10) days, the Missouri Department of Transportation may give notice in writing by registered mail to the Contractor/supplier and the surety of such delay, neglect or default.
- b. If, within ten (10) days after such notice the Contractor/supplier does not proceed to remedy to the satisfaction of the Department's representatives the faults specified in said notice, or the surety does not proceed to take over the deliveries, the Department shall have full power and authority, without impairing the obligation of the Contractor/supplier under the contract or the surety under the bond, to take over the completion of the work and arrange for the shipment of any materials necessary to complete the work and the Contractor/supplier and the surety will be responsible for any additional costs incurred by the Department in obtaining the completion of the deliveries.

Liquidated Damages

- a. In the event the successful Contractor fails to deliver the material within the time specified, the Department and the public will sustain damages because of such delay in delivery, the exact extent of which would be difficult to ascertain, and in order to liquidate such damage in advance it is agreed that the sum of one-hundred dollars (\$100.00) per day, per item, for each assessable calendar day on which the delivery has not been completed, is reasonable and the best estimate which the parties can arrive at as liquidated damages, and it is therefore agreed that said amount will be withheld from payments due the Contractor or otherwise collected from the Contractor as liquidated damages.
- b. Saturdays, Sundays, holidays and days whereas the Department has suspended work shall not be assessable days.

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SECTION 07311 ASPHALT SHINGLES WORK

GENERAL

1.1	CEOUTON	***	* *** ** *
1.1	SECTION	INCI	JUDES

- A. Granular surfaced asphalt roofing.
- B. Ice dam protection, moisture shedding asphalt felt, eave protection.
- C. Associated metal flashing and accessories.

1.2 RELATED SECTIONS

- A. Section 06112 Framing and Sheathing: Roof sheathing.
- B. Section 07631 Gutters and Downspouts.

1.3 REFERENCES

- A. ASTM D225 Asphalt Shingles Surfaced with Mineral Granules.
- B. ASTM D226 Asphalt Saturated Organic Felt Used in Roofing and Waterproofing.
- C. ASTM D2822 Asphalt Roof Cement.
- D. ASTM D3018 Class A Asphalt Shingles Surface with Mineral Granules.
- E. ASTM D4586 Asphalt Roof Cement, Asbestos Free.

1.6 REGULATORY REQUIREMENTS

A. Conform to applicable code for UL 55B Class A rating, UL 580 wind uplift for shingles types specified.

1.7 ENVIRONMENTAL REQUIREMENTS

- A. Section 01600 Material and Equipment: Environmental conditions affecting products on site.
- B. Do not install eave edge protection and shingles when surface, or wind chill temperatures are below 45 degrees F.

1.8 EXTRA MATERIALS

- A. Section 01700 Contract Closeout.
- B. Provide 50 sq. ft. of extra shingles used on this job.

PART 2 PRODUCTS

2.1 ASPHALT SHINGLES

- A. 3 –Tab Shingles: Mineral-surfaced, self-sealing, Organic strip shingles, minimum 25-year limited warranty complying with ASTM 3462, ASTM D –3018 Type 1, bearing UL Class "A" external fire exposure label and UL "Wind Resistant" label, Color shall be as approved by Owner.
 - 1. Ridge Shingles: Manufacturer's standard factory pre-cut units to match shingles or job fabricated units cut from actual shingles used.
 - 2. GAF, Georgia Pacific, Elk etc...
 - B. Underlayment: ASTM D226,No. 30 lb. Asphalt saturated felts as recommended for use in waterproofing.

2.2 ACCESSORIES

- A. Nails: Standard round wire shingles type hot dipped zinc coated steel type, of sufficient lenghtto penetrate through roof sheathing, 1-1/4 minimum.
- B. Plastic Cement: ASTM D2822, Asphalt type with mineral fiber components, free of toxic solvent, capable of setting within 24 hours at temperatures of 75 degrees F and 50 percent RH. Cement: Fibrated cutback asphalt type, recommended for use in application of underlayment, free of toxic solvents.

2.3 FLASHING MATERIALS

- A. Sheet Flashing: .019 Aluminum sheet flashing.
- B. Nails: Standard round wire roofing nail, hot dipped zinc coated steel; of sufficient length to penetrate through the roof sheathing.

2.4 FLASHING FABRICATION

- A. Form flashing to protect roofing materials from physical damage and shed water.
- B. Form sections square and accurate to profile, in maximum possible length, free from distortion or defects detrimental to appearance or performance.
- C. Hem exposed edges of flashing minimum 1/4 inch on underside.
- D. Apply bituminous paint on concealed surfaces of flashings.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Section 01039 Coordination and Meetings: Verification of existing conditions prior to beginning work.
- B. Verify that roof penetrations and plumbing stacks are in place and flashing to deck surface.
- C. Remove and dispose of all the existing shingles, felt roof edging and other debris. This should meet DNR requirements for shingles disposable.
- D. Verify deck surface is dry no warps and free from rot, if need be replace needed decking.

3.2 PREPARATION

A. Broom clean deck surface under eave protection and underlayment.

3.4 INSTALLATION – PROTECTIVE UNDERLAYMENT

- A. Begin underlayment at drip edge, with ends and edges weather lapped minimum 4 inches. Stagger end laps of each consecutive layer. Nail in place.
- B. Install protective underlayment perpendicular to slope of roof and weather lap minimum 4 inches over eave protection.

3.5 INSTALLATION – METAL FLASHING AND ACCESSORIES

- A. Weather lap joints minimum 2 inches and seal weather tight with plastic cement.
- B. Secure in place with nail at 8 inches oc. Conceal fastening.
- C. Flash and seal work weather tight, projecting through or mounted on roofing with plastic cement.

3.6 INSTALLATION – ASPHALT SHINGLES

- A. Install shingles in straight coursing pattern with 5 inch weather exposure to produce double thickness over full roof area. Provide double course of shingles at eaves.
- B. Install shingles in accordance with manufacturer's instructions.
- C. Protect first course of shingles 1/4 inch beyond fascia boards.
- D. Extend shingles 1/2 inch beyond the face of the edge fascia boards.
- E. Cap hip and ridge with individual shingles, maintaining 5 inch weather exposure. Place to avoid exposed nails.
- F. Complete installation to provide weather tight service.

3.8 PROTECTION OF FINISHED WORK

- A. Section 01700 Contract Closeout: Protecting installed work.
- B. Do not permit traffic over finished roof surface.